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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/888,600      | 06/26/2001  | Jun Andoh            | 210290US3           | 8667             |

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EXAMINER

THOMAS, BRANDI N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2873     |              |

DATE MAILED: 04/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |              |
|------------------------------|-----------------|--------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |
|                              | 09/888,600      | ANDOH ET AL. |
| Examiner                     | Art Unit        |              |
| Brandi N Thomas              | 2873            |              |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- If Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

4) Claim(s) 18-33 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 18-33 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 26 June 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) Other: *Detailed Action* .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (5257138).

Regarding claim 18, Yamaguchi et al. discloses a structure for fixing an optical element comprising: a base member (38) having an attaching surface (see figure 3); an optical element (20) which is mounted on said base member and has side surfaces around a surface through which light passes (col. 5, lines 15-19); and intermediate holding member (46) for fixing said optical element to said base member (col. 5, lines 25-26), wherein said intermediate holding member (46) includes a first attaching surface which contacts with each of said side surfaces of said optical element and a second attaching surface mounted on said attaching surface of said base member and extending from said first attaching surface in a different angle (see figure 3 and 6) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an holding member on each side of the lens for the purpose of securing the lens, and wherein said first attaching surface of the intermediate holding member and said side surface of said optical element, and said second attaching surface of said intermediate holding member and said attaching surface of said base member are fixed by adhesive agent and it would

have been obvious to one of ordinary skill in the art at the time the invention was made to adhere the holding member to the lens and the base with an adhesive for securing the lens in the base.

Regarding claim 20, Yamaguchi et al. discloses an adhesive agent (UV bond) is a light hardening adhesive agent and said intermediate holding members are transparent for at least light which hardens said light hardening adhesive agent (col. 7, lines 27-33). It is inherent that the holding member is transparent for the light that hardens the adhesive agent.

Regarding claim 21, Yamaguchi et al. discloses the first and second attaching surfaces of said intermediate holding members are perpendicular with respect to each other (see figure 6).

Regarding claim 22, Yamaguchi et al. discloses the claimed invention except for ribs. It would have been obvious to someone of ordinary skill in the art at the time the invention was made to use ribs since it was known in the art that ribs are used for securing or stabilizing an object or element.

Regarding claim 23 and 25, Yamaguchi discloses said optical element has at opposite side surface portions, each of which faces to each of the first and attaching surfaces of said intermediate holding members (see figure 3), however, Yamaguchi et al. does not specifically disclose a lens with a flat side. The examiner takes official notice that it is well known in the art to grind the side of a lens from a round surface to a flat surface and it would have been obvious to grind the side of the lens for stable mounting.

Regarding claim 24, Yamaguchi et al. discloses wherein said flat portions are parallel to an optical axis of said optical element (see figure 3).

3. Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (5257138) as applied to claim 18 above, and further in view of Kawakami et al. (4780739).

Regarding claims 19 and 27, Yamaguchi et al. substantially teaches the claimed invention except that it does not show a photoelectric transforming member. Kawakami et al shows that it is known to provide a photoelectric transforming member (2) for converting light to an electrical signal (col. 7, lines 4-5). Therefore it would have been obvious to someone of ordinary skill in the art at the time the invention was made to combine the teaching of Yamaguchi et al. with the photoelectric transforming member of Kawakami et al for the purpose of converting light to an electrical signal (col. 7, lines 4-5).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (5257138) as applied to claim 18 above, and further in view of Umetsu (6361177 B2).

Regarding claim 26, Yamaguchi et al. discloses the claimed invention except that it does not show a spacing member. Umetsu discloses spacing members each having a side contacting surface which is aligned with each of the side surfaces of said optical element, and having an aligning surface which is aligned with each of the first attaching surfaces of the intermediate holding members, said side contacting surface of each of the spacing members facing to the side surface of each of said side surfaces of said optical element, and said aligning surface of each of said spacing members facing to each of the first attaching surfaces of said intermediate holding members for securely holding the lens and to cover the bottom of the lens (col. 9, lines 14-15 and figure 7). Therefore it would have been obvious to someone of ordinary skill in the art at the

time the invention was made to combine the device of Yamaguchi et al. with the spacing member of Umetsu for the purpose of aligning the optical axis (col. 7, lines 25-29).

5. Claims 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (4780739) in view of Yamaguchi et al. (5257138).

Regarding claim 28, Kawakami et al. discloses a unit for inputting image data in which a solid state image forming device is disposed at a position where an image is focused by an image focusing lens (col. 3, lines 6-10) except it does not show intermediate holding members and first and second attaching surfaces. Yamaguchi discloses a base member (38) having an attaching surface (see figure 3); an optical element (20) which is mounted on said base member and has side surfaces around a surface through which light passes (col. 5, lines 15-19); and intermediate holding member (46) for fixing said optical element to said base member (col. 5, lines 25-26), wherein said intermediate holding member (46) includes a first attaching surface which contacts with each of said side surfaces of said optical element and a second attaching surface mounted on said attaching surface of said base member and extending from said first attaching surface in a different angle (see figure 3 and 6) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an holding member on each side of the lens for the purpose of securing the lens, and wherein said first attaching surface of the intermediate holding member and said side surface of said optical element, and said second attaching surface of said intermediate holding member and said attaching surface of said base member are fixed by adhesive agent and it would have been obvious to one of ordinary skill in the art at the time the invention was made to adhere the holding member to the lens and the base with an adhesive for

securing the lens in the base. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kawakami et al. (4780739) with the intermediate holding members and first and second attaching surfaces for the purpose of securing the lens in a base.

Regarding claim 29, Kawakami et al. discloses an imaging device with a cover between said image focusing lens and the solid state image device (col. 3, lines 6-9 and fig. 3).

Regarding claim 30, Kawakami et al. discloses wherein said image focusing lens is composed of a plurality of lenses (col. 6, lines 10-12).

Regarding claims 31-33, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an image data input apparatus utilize an image data input unit this being reasonably based upon the image data input apparatus cannot function without an image data input.

#### *Response to Arguments*

6. Applicant's arguments with respect to claims 18-33 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kashiwaba et al. (US 2002/0018296 A1) discloses an optical element holding mechanism, which can be simply arranged to be capable of accurately correcting deviation of an optical axis.

Jerman et al. (6473553 B1) discloses an apparatus for holding micron-sized objects, such as optical components and the method for making the apparatus.

Ogawa et al. (6247817 B1) discloses a projection-type display apparatus to reduce the margin formed around the image forming range.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2873

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N Thomas whose telephone number is 703-308-3095. The examiner can normally be reached on 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4883.

*BNT*

BNT  
April 17, 2003

*R. Mack*

RICKY MACK  
PRIMARY EXAMINER